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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/830,748B

DATE: 04/21/2003

TIME: 17:08:21

Input Set : A:\pto.txt

Output Set: N:\CRF4\04212003\I830748B.raw

3 <110> APPLICANT: The Government of the United States of America, as represented by The  
4 Secretary of the Department of Health and Human Services  
5 Kashmiri, Syed V.S.  
6 Padlan, Eduardo A.  
7 Jeffery, Schlom  
9 <120> TITLE OF INVENTION: VARIANTS OF HUMANIZED ANTI-CARCINOMA MONOCLONAL ANTIBODY

CC49

11 <130> FILE REFERENCE: 4239-61725  
13 <140> CURRENT APPLICATION NUMBER: US 09/830,748B  
14 <141> CURRENT FILING DATE: 2001-04-30  
16 <150> PRIOR APPLICATION NUMBER: PCT/ US99/25552  
17 <151> PRIOR FILING DATE: 1999-10-29  
19 <150> PRIOR APPLICATION NUMBER: US 60/106,757  
20 <151> PRIOR FILING DATE: 1998-11-02  
22 <150> PRIOR APPLICATION NUMBER: US 60/106,534  
23 <151> PRIOR FILING DATE: 1998-10-31  
25 <160> NUMBER OF SEQ ID NOS: 44  
27 <170> SOFTWARE: PatentIn version 3.1  
29 <210> SEQ ID NO: 1  
30 <211> LENGTH: 17  
31 <212> TYPE: PRT  
32 <213> ORGANISM: Mus musculus  
34 <400> SEQUENCE: 1  
36 Lys Ser Ser Gln Ser Leu Leu Tyr Ser Gly Asn Gln Lys Asn Tyr Leu  
37 1 5 10 15  
40 Ala  
44 <210> SEQ ID NO: 2  
45 <211> LENGTH: 7  
46 <212> TYPE: PRT  
47 <213> ORGANISM: Mus musculus  
49 <400> SEQUENCE: 2  
51 Trp Ala Ser Ala Arg Glu Ser  
52 1 5  
55 <210> SEQ ID NO: 3  
56 <211> LENGTH: 9  
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58 <213> ORGANISM: Mus musculus  
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62 Gln Gln Tyr Tyr Ser Tyr Pro Leu Thr  
63 1 5  
66 <210> SEQ ID NO: 4  
67 <211> LENGTH: 5  
68 <212> TYPE: PRT  
69 <213> ORGANISM: Mus musculus

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73 Asp His Ala Ile His
74 1 5
77 <210> SEQ ID NO: 5
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79 <212> TYPE: PRT
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84 Tyr Phe Ser Pro Gly Asn Asp Asp Phe Lys Tyr Asn Glu Arg Phe Lys
85 1 5 10 15
88 Gly
92 <210> SEQ ID NO: 6
93 <211> LENGTH: 6
94 <212> TYPE: PRT
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99 Ser Leu Asn Met Ala Tyr
100 1 5
103 <210> SEQ ID NO: 7
104 <211> LENGTH: 17
105 <212> TYPE: PRT
106 <213> ORGANISM: Homo sapiens
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110 Lys Ser Ser Gln Ser Val Leu Tyr Ser Ser Asn Ser Lys Asn Tyr Leu
111 1 5 10 15
114 Ala
118 <210> SEQ ID NO: 8
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120 <212> TYPE: PRT
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123 <400> SEQUENCE: 8
125 Trp Ala Ser Thr Arg Glu Ser
126 1 5
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130 <211> LENGTH: 9
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136 Gln Gln Tyr Tyr Ser Thr Pro Tyr Ser
137 1 5
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141 <211> LENGTH: 5
142 <212> TYPE: PRT
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145 <400> SEQUENCE: 10
147 Ser Tyr Ala Met His
148 1 5
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153 <212> TYPE: PRT  
 154 <213> ORGANISM: Homo sapiens  
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 158 Trp Ile Asn Ala Gly Asn Gly Asn Thr Lys Tyr Ser Gln Lys Phe Gln  
 159 1 5 10 15  
 162 Gly  
 166 <210> SEQ ID NO: 12  
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 168 <212> TYPE: PRT  
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 178 <211> LENGTH: 113  
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 182 <220> FEATURE:  
 183 <223> OTHER INFORMATION: Mouse and Human Chimeric Antibody Light Chain Variable

## Region

185 <400> SEQUENCE: 13  
 187 Asp Ile Val Met Ser Gln Ser Pro Asp Ser Leu Ala Val Ser Leu Gly  
 188 1 5 10 15  
 191 Glu Arg Val Thr Leu Asn Cys Lys Ser Ser Gln Ser Leu Leu Tyr Ser  
 192 20 25 30  
 195 Gly Asn Gln Lys Asn Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln  
 196 35 40 45  
 199 Ser Pro Lys Leu Leu Ile Tyr Trp Ala Ser Ala Arg Glu Ser Gly Val  
 200 50 55 60  
 203 Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr  
 204 65 70 75 80  
 207 Ile Ser Ser Val Gln Ala Glu Asp Val Ala Val Tyr Tyr Cys Gln Gln  
 208 85 90 95  
 211 Tyr Tyr Ser Tyr Pro Leu Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu  
 212 100 105 110  
 215 Lys

219 <210> SEQ ID NO: 14  
 220 <211> LENGTH: 115  
 221 <212> TYPE: PRT  
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## Region

227 <400> SEQUENCE: 14  
 229 Gln Val Gln Leu Val Gln Ser Gly Ala Glu Val Val Lys Pro Gly Ala  
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 233 Ser Val Lys Ile Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Asp His  
 234 20 25 30  
 237 Ala Ile His Trp Val Lys Gln Asn Pro Gly Gln Arg Leu Glu Trp Ile  
 238 35 40 45  
 241 Gly Tyr Phe Ser Pro Gly Asn Asp Asp Phe Lys Tyr Asn Glu Arg Phe

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242      50      55      60
245 Lys Gly Lys Ala Thr Leu Thr Ala Asp Thr Ser Ala Ser Thr Ala Tyr
246 65      70      75      80
249 Val Glu Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr Phe Cys
250      85      90      95
253 Thr Arg Ser Leu Asn Met Ala Tyr Trp Gly Gln Gly Thr Leu Val Thr
254      100      105      110
257 Val Ser Ser
258      115
261 <210> SEQ ID NO: 15
262 <211> LENGTH: 124
263 <212> TYPE: DNA
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: VH Oligonucleotide Primer
269 <400> SEQUENCE: 15
270 ctaagcttcc accatggagt ggtcctgggt cttcctcttc ctctgtctgc tgtgggtgag      60
272 agtgcactcc caggtccagc tgggtgcagtc cggcgctgag tccctggccg tgtcccaggg      120
274 cgtg      124
277 <210> SEQ ID NO: 16
278 <211> LENGTH: 123
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial Sequence
282 <220> FEATURE:
283 <223> OTHER INFORMATION: VH Oligonucleotide Primer
285 <400> SEQUENCE: 16
286 ggagagaaat atccaatcca ctccaggcgc tgtccaggat tctgtttctt ctgatttccg      60
288 ctatagagag tgaaggtgta gccgcttgcc ttgcaggaaa tcttcacgcc cagggacacg      120
290 gcc      123
293 <210> SEQ ID NO: 17
294 <211> LENGTH: 126
295 <212> TYPE: DNA
296 <213> ORGANISM: Artificial Sequence
298 <220> FEATURE:
299 <223> OTHER INFORMATION: VH Oligonucleotide Primer
301 <400> SEQUENCE: 17
302 tggagtggat tggatatttc tctcccggaa acgatgattt taagtacaat gagaggttca      60
304 agggcaaggc cacactgact gcagacacat ctgccagcac tgacctacgtg gagctctcca      120
306 gcctga      126
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310 <211> LENGTH: 125
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: VH Oligonucleotide Primer
317 <400> SEQUENCE: 18
318 atggggcccg agttttggcg ctggagacgg tgaccagggt tccctgtccc cagtaggcca      60
320 tattcaggga tcttgtgcag aagtaactg cagtatcctc ggatctcagg ctggagagct      120
322 ccacg      125

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327 <212> TYPE: DNA
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330 <220> FEATURE:
331 <223> OTHER INFORMATION: VL Oligonucleotide Primer
333 <400> SEQUENCE: 19
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336 cggcacatgc ggcgacatcg tgatgagcca gtctccagac tccctggccg tgtcccagg      120
338 cg                                                                122
341 <210> SEQ ID NO: 20
342 <211> LENGTH: 121
343 <212> TYPE: DNA
344 <213> ORGANISM: Artificial Sequence
346 <220> FEATURE:
347 <223> OTHER INFORMATION: VL Oligonucleotide Primer
349 <400> SEQUENCE: 20
350 gggctctgcc ctggtttctg ctgataccag gcgagatagt tcttctgatt tccgctatag      60
352 agcagggact ggctggactt gcaattcaga gtcaccctct cgcccaggga cacggccagg      120
354 g                                                                121
357 <210> SEQ ID NO: 21
358 <211> LENGTH: 121
359 <212> TYPE: DNA
360 <213> ORGANISM: Artificial Sequence
362 <220> FEATURE:
363 <223> OTHER INFORMATION: VL Oligonucleotide Primer
365 <400> SEQUENCE: 21
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368 cgtgcctgat cgcttcagcg gcagcggatc tgggacagac ttcactctga caatcagcag      120
370 c                                                                121
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375 <212> TYPE: DNA
376 <213> ORGANISM: Artificial Sequence
378 <220> FEATURE:
379 <223> OTHER INFORMATION: VL Oligonucleotide Primer
381 <400> SEQUENCE: 22
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384 atactgctga caataataga ctgccacgct ttctgcctgc acgctgctga ttgtcagagt      120
386 gaagtc                                                                126
389 <210> SEQ ID NO: 23
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397 <400> SEQUENCE: 23
398 ctaagcttcc accatggag                                                                19
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VERIFICATION SUMMARY

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